

fu



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/547,281	04/12/2000	Hagen Schempf	99146	4983

7590 03/11/2003

Jonathan C Parks Esquire  
Kirkpatrick & Lockhart LLP  
Henry W Oliver Building  
535 Smithfield Street  
Pittsburgh, PA 15222

EXAMINER

HOOK, JAMES F

ART UNIT PAPER NUMBER

3752

DATE MAILED: 03/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/547,281

Applicant(s)  
Schempf et al.

Examiner  
James F. Hook

Art Unit  
3752



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Dec 17, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-21, and 23-72 is/are pending in the application.
- 4a) Of the above, claim(s) 2-11, 21, and 23-72 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 12, and 14-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

Art Unit: 3752

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Ruch. The patent to Ruch discloses the recited multi-module pipe repair/inspection device comprising a base module 20, a module 50 which can be provided with stabilizers, a traction module 14 which can include a motor to move the device, a microprocessor inherently must be provided in the base module in order to perform the control function, sensors can be provided in various modules as suggested by metering devices, and where all the modules are connected by flexible detachable joints 30 that have electrical connections so the modules can talk to one another while allowing for disconnection of modules and use any other modules as needed.

Art Unit: 3752

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 12 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smart (783) in view of Penza and Ruch. The patent to Smart discloses the recited multi-module pipe repair/inspection device comprising a base module 12, a module 13 which can be provided with stabilizers 40, a traction module 11 which can include a motor 20 to move the device, a microprocessor provided in the base module, sensors can be provided in various modules including a sensor module 14, and where all the modules are connected by flexible joints that have electrical connections so the modules can talk to one another. The patent to Smart discloses all of the recited structure with the exception of providing a brush module formed with a centrifugal spring biased inward array of brushes and a camera and forming the connections to allow for detaching modules and making them interchangeable. The patent to Penza discloses the recited pipe repair/inspection device comprising a brush module 2 which can be made of steel, and can comprise stabilizers and wheels 3, and a spinning brush head 250 that is provided with radially extending brushes in an array where the brushes are connected by springs to the body to hold the brushes out of contact with the pipe and when the body spins the centrifugal force overcomes the

Art Unit: 3752

spring force allowing the brushes to contact the wall of the pipe, and where a camera or sensing device can be provided to monitor the pipe and various operations. It would have been obvious to one skilled in the art to modify the device in Smart by providing a brush module with a camera and spring biased brushes to allow for the cleaning away of debris inside the pipe and for inspecting the pipe as suggested by Penza. It would have been obvious to one skilled in the art to modify the connection in Smart by forming it of a connection that can be disconnected to allow for interchanging the modules as suggested by Ruch as such will allow the apparatus to be used for various functions rather than limited to only one function.

5. Claims 1, 12, and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Penza in view of Smart (783) and Ruch. The patent to Penza discloses all of the recited structure with the exception of providing separate modules to perform the tasks of locomotion, stabilizing, sensing and control, and providing a microprocessor to control the device. It would have been obvious to one skilled in the art to modify the device in Penza by providing separate modules for sensors, locomotion, control, and stabilizing the device to allow the device to have all these components yet be more flexible in that it would be made of smaller linked parts, and to provide a microprocessor to allow the device to act more on its own as suggested by Smart. It would have been obvious to one skilled in the art to modify the connection in Penza by forming it of a connection that can be disconnected to allow for interchanging the modules as suggested by Ruch as such will allow the apparatus to be used for various functions rather than limited to only one function.

Art Unit: 3752

*Response to Arguments*

6. Applicant's arguments with respect to claims 1, 12, and 14-20 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

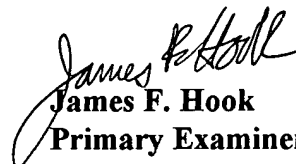
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3752

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Hook whose telephone number is (703) 308-2913.

J. Hook  
March 10, 2003

  
**James F. Hook**  
**Primary Examiner**  
**Art Unit 3752**